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November 23, 2015

VIA ELECTRONIC SUBMISSION

Marlene Dortch
Secretary
Federal Communications Commission
Washington, DC 20554

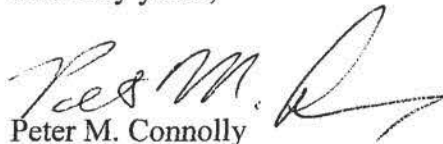
Re: Application of USCOC of Central Illinois, LLC and Adams Telcom, Inc. For Consent to
Assign Two Lower 700 MHz with Block Licenses (WT Docket No. 15-266)

Dear Ms. Dortch:

Transmitted herewith, on behalf of USCOC of Central Illinois, LLC and its parent company, United States Cellular Corporation, is a redacted version of its Response to the November 9, 2015 letter from Roger Sherman, Chief of the Wireless Telecommunications Bureau, to John Gockley of United States Cellular Corporation seeking additional information concerning the above-referenced application.

In the event there are any questions concerning this matter, please communicate with the undersigned.

Sincerely yours,


Peter M. Connolly

cc (via email):

Scott Patrick (FCC)
Kate Matraves (FCC)
Jim Bird (FCC)

Redacted For Public Inspection

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November 23, 2015

Roger C. Sherman
Chief, Wireless Telecommunications Bureau
Federal Communications Commission
Washington, DC 20554

Re: Application of USCOC of Central Illinois, LLC and Adams Telcom, Inc. For
Consent to Assign Two Lower 700 MHz (Block Licenses) (WT Docket No. 15-266)
(Confidential Information – Subject to Protective Order in WT Docket No. 15-266
Before Federal Communications Commission)

Dear Mr. Sherman:

On behalf of USCOC of Central Illinois, LLC and its parent company United States Cellular Company (collectively “USCC”), this will respond to your letter of November 9, 2015 seeking “additional information, documents and clarification of certain matters discussed in the application and other information provided to the Commission.”

For convenience, we will reprint each of the Commission’s questions before providing our response.

QUESTION 1. On page 1 of the Public Interest Statement, the Applicants claim that USCC “plans to use the 700 MHz spectrum to implement its Long Term Evolution (‘LTE’) deployment in the relevant license areas.” Further, on page 3 of the Public Interest Statement, the Applicants assert that additional 700 MHz spectrum is needed to allow USCC “to offer their customers a 10 x 10 channel with throughput speeds comparable to those of the larger carriers.” For each Relevant Area, provide:

a. A detailed discussion of the Company’s plans to provide advanced mobile telephony/broadband services prior to the Proposed Transaction, including a detailed description of the Company’s current and planned deployment of LTE, which identifies the spectrum bands and the total amount of spectrum used for LTE deployment.

- b. A detailed description of how the Company would use the spectrum that it would acquire under the Proposed Transaction, including its timeline for deployment, to provide advanced mobile telephony/broadband services to consumers, on a standalone basis and/or in conjunction with any other of the Company's spectrum holdings.
- c. A detailed description of how deployment of a 10 x 10 MHz LTE network would improve throughput speeds.
- d. A detailed explanation of why the Company needs more than one-third of the suitable and available spectrum below 1 GHz for the provision of mobile wireless services.
- e. Provide all documents relied on in preparing the responses to 1(a)-1(d).

Answer to Question 1(a)

The proposed acquisition involves the seventeen counties comprising Illinois RSAs #3 and #4.¹ Attachment A hereto is a map of the Relevant Area. In order to provide competitive service, USCC plans to utilize the additional 12 MHz of 700 MHz C Block Spectrum it seeks to acquire in the Proposed Transaction to upgrade and enhance its existing 700 MHz LTE deployment from 5 x 5 MHz channel to a 10 x 10 MHz channel. This will allow USCC to provide an LTE experience comparable to its competitors.

USCC's plans for LTE deployment in the Relevant Area are as follows. In order to allow for an orderly transition of customers of Adams Telcom's fixed wireless service on the spectrum to be transferred, USCC plans to enter into a spectrum lease agreement with Adams Telcom upon closing, affecting six of the counties in the Relevant Area, namely Hancock, McDonough, Schuyler, Adams, Brown, and Pike counties. The counties are shown in the map attached as Attachment A. The lease will terminate no later than June 2017. USCC would plan to deploy LTE technology throughout those counties and the remainder of the Relevant Area by six months after the termination of the lease, that is, by the end of 2017.

As noted, USCC plans to utilize the additional 12 MHz of 700 MHz C Block spectrum it seeks to acquire in the Proposed Transaction to upgrade and enhance its existing 700 MHz LTE capacity from a single 5 x 5 MHz channel. USCC will first develop two 5 x 5 700 MHz LTE channels. Then, working with its device and manufacturer partners, USCC plans to develop the "carrier aggregation technology" necessary to support an aggregated 700 MHz 10 x 10 MHz channel (Band Class 12).

Attachment B hereto consists of an internal USCC "Power Point" presentation from August, 2015 describing USCC's "valuation" of the Adams Telcom license in the Relevant Area.

Attachment C hereto consists in part of analytic charts prepared for USCC comparing, in detail, USCC's network performance in the Relevant Area and that of AT&T, Sprint, T-Mobile, and Verizon Wireless.

¹ Those counties are Mercer, Knox, Warren, Henderson, Hancock, Fulton, McDonough, Schuyler, Adams, Brown, Cass, Pike, Scott, Morgan, Calhoun, Greene, and Macoupin.

USCC currently offers CDMA, EVDO, and LTE services in the Relevant Area. These services are deployed on USCC's current spectrum holdings. These consist in part of 25 MHz of A and B Block spectrum in Illinois RSA #3 and #4 respectively. The cellular spectrum band is now used to support USCC's [REDACTED] services in the Relevant Area. USCC is also licensed for between 10 and 50 MHz of PCS spectrum in different counties in the Relevant Area. That spectrum is now used [REDACTED] services. PCS spectrum characteristics are not ideal for LTE and USCC would prefer to expand its LTE capacity on lower frequency 700 MHz spectrum.

Lastly 12 MHz of 700 MHz spectrum (Band Class 12) is licensed to King Street Wireless, L.P. ("King Street"), a Commission licensee in which an affiliate of USCC is a limited partner, in most of the counties of the Relevant Area. [REDACTED]

The chart below, taken from the pending application, graphically describes USCC's present and proposed spectrum holdings in the relevant area together with the King Street spectrum to which USCC has access.

Attachment A - USCC Spectrum Aggregation

| License Area | County | ST | County FIPS | Overlap BTA Number/Name | Overlap MTA Number/Name | Overlap EA Number/Name | Proposed USCC Lowerband 700 MHz C Block Spectrum Acquisition (in MHz) | Currently Licensed Attributable USCC Cellular A/B Bk Spectrum (in MHz) | Currently Licensed Attributable USCC 700 MHz Spectrum (in MHz) | Currently Licensed Attributable USCC PCS A/E Bk Spectrum (in MHz) | Total Attributable Sub 1 GHz USCC Spectrum - Post Transaction Closing | Total Attributable USCC CMRS Spectrum - Post Transaction Closing |
|--|-----------|----|-------------|--------------------------------|------------------------------|---|---|--|--|---|---|--|
| CMA396 - Illinois 3 - Mercer (WQDM567) | Fullton | IL | 17057 | 344 - Peoria, IL | 003 - Chicago | 101 - Peoria-Pekin, IL | 12 MHz | 25 MHz (*U) | 12 MHz (*U) | 40 MHz (*U) | 49 MHz | 89 MHz |
| | Hancock | IL | 17087 | 081 - Burlington, IA | 032 - Des Moines-Quad Cities | 100 - Des Moines, IA-IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 40 MHz (*U) | 49 MHz | 89 MHz |
| | Henderson | IL | 17071 | 081 - Burlington, IA | 032 - Des Moines-Quad Cities | 100 - Des Moines, IA-IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 40 MHz (*U) | 49 MHz | 89 MHz |
| | Knox | IL | 17085 | 181 - Galesburg, IL | 003 - Chicago | 101 - Peoria-Pekin, IL | 12 MHz | 25 MHz (*U) | 12 MHz (*U) | 50 MHz (*U) | 49 MHz | 99 MHz |
| | McDonough | IL | 17109 | 344 - Peoria, IL | 003 - Chicago | 101 - Peoria-Pekin, IL | 12 MHz | 25 MHz (*U) | 12 MHz (*U) | 40 MHz (*U) | 49 MHz | 89 MHz |
| | Mercer | IL | 17131 | 105 - Davenport, IA-Moline, IL | 032 - Des Moines-Quad Cities | 102 - Davenport-Moline-Rock Island, IA-IL | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 20 MHz (*U) | 49 MHz | 89 MHz |
| | Schuyler | IL | 17169 | 344 - Peoria, IL | 003 - Chicago | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 40 MHz (*U) | 49 MHz | 89 MHz |
| | Warren | IL | 17187 | 161 - Galesburg, IL | 003 - Chicago | 101 - Peoria-Pekin, IL | 12 MHz | 25 MHz (*U) | 12 MHz (*U) | 50 MHz (*U) | 49 MHz | 99 MHz |
| CMA397 - Illinois 4 - Adams (WQDM568) | Adams | IL | 17001 | 367 - Quincy, IL-Hannibal, MO | 019 - St. Louis | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 30 MHz (*U) | 49 MHz | 79 MHz |
| | Brown | IL | 17009 | 367 - Quincy, IL-Hannibal, MO | 019 - St. Louis | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 30 MHz (*U) | 49 MHz | 79 MHz |
| | Calhoun | IL | 17013 | 364 - St. Louis, MO | 019 - St. Louis | 098 - St. Louis, MO-IL | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 10 MHz (*U) | 49 MHz | 59 MHz |
| | Cass | IL | 17017 | 213 - Jacksonville, IL | 003 - Chicago | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 35 MHz (*U) | 49 MHz | 84 MHz |
| | Greene | IL | 17081 | 213 - Jacksonville, IL | 003 - Chicago | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 35 MHz (*U) | 49 MHz | 84 MHz |
| | Macoupin | IL | 17117 | 364 - St. Louis, MO | 019 - St. Louis | 098 - St. Louis, MO-IL | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 10 MHz (*U) | 49 MHz | 59 MHz |
| | Morgan | IL | 17137 | 213 - Jacksonville, IL | 003 - Chicago | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 35 MHz (*U) | 49 MHz | 84 MHz |
| | Pike | IL | 17149 | 367 - Quincy, IL-Hannibal, MO | 019 - St. Louis | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 30 MHz (*U) | 49 MHz | 79 MHz |
| | Scott | IL | 17171 | 213 - Jacksonville, IL | 003 - Chicago | 097 - Springfield, IL-MO | 12 MHz | 25 MHz (*U) | 12 MHz (*K) | 35 MHz (*U) | 49 MHz | 84 MHz |
| | | | | | | | | | | | | |

*K - attributable spectrum held through King Street Wireless, L.P., of which US Cellular holds an indirect, non-controlling 90% interest
*U - spectrum held directly by US Cellular controlled entities

USCC has undertaken research to determine how its present network operations in the Relevant Area compares with those of Verizon, Sprint, T-Mobile and AT&T. Nielsen, under contract to USCC, made the comparative analysis, which is summarized in the detailed charts included in Attachment C. The charts describe network “throughput” rankings in the Relevant Area. They provide information regarding network “throughput” speeds both to wireless handsets (“GET”) and from wireless handsets (“POST”). [REDACTED]

[REDACTED] Thus, USCC seeks the additional spectrum to improve its system throughput and thus enhance its long term competitive position.

Answer to QUESTION 1(b):

To put it simply, a 10x10 MHz LTE deployment provides throughput speeds and additional capacity that are approximately two times the speed and capacity of a 5x5 MHz LTE deployment. Attached hereto as Attachment D is a PowerPoint presentation, prepared by USCC, which compares the operations of 1X EV-DO Rev.A, 5x5 MHz LTE, and 10x10 MHz LTE systems with respect to download speeds, upload speeds, airlink latency, connection setup times, movie download times, MP3 download times, and e-mail and attachment download times. As shown in the chart, 10x10 MHz LTE performance is far superior to that of 5x5 MHz operations.

In that connection, we would note that the FCC has repeatedly stressed the importance of improving carrier broadband speed to meet its educational and other public interest goals. See, e.g., In the Matter of Modernizing the E-Rate Program For Schools and Libraries Connect America Fund, Second Report and Order on Reconsideration, W.C. Docket Nos 13-184 and 10-90, FCC 14-189, released December 19, 2014, ¶68 (“We require high-cost support recipients to offer high-speed broadband connections sufficient to meet the targets set forth in the E-Rate Modernization Order...”).

Answer to QUESTION 1(c):

As noted above, USCC made a judgment that it needed the additional 700 MHz spectrum to improve its network in the Relevant Area and provide an LTE experience comparable to that provided by its competitors. As is also noted above, Attachment C hereto consists of detailed comparative charts comparing the network “throughput” in the Relevant Area of Verizon Wireless, AT&T, T-Mobile, Sprint, and USCC. [REDACTED]

Answer to QUESTION 1(d):

[REDACTED] Certain C Block 700 MHz spectrum compatible with USCC’s network was available in the Relevant Area and USCC believed that that spectrum was essential to the achievement of an improved network and competitive parity with its larger rivals.

Answer to QUESTION 1(e):

The documents are provided in Attachments A-D and are discussed above.

QUESTION 2. Provide polygons in an ESRI shapefile format representing geographic coverage for USCC, including each mobile broadband network technology (e.g., CDMA, EV-DO, EV-DO Rev. A, GSM, EDGE, UMTS, HSPA, HSPA+, LTE) deployed in each frequency band (e.g., Lower 700 MHz, Cellular, AWS-1, PCS). Provide all assumptions, methodology (e.g., propagation, projection, field measurements), calculations (including link budgets), tools (e.g., predictive and field measurements) and data (e.g., terrain, morphology, buildings) used in the production of the polygons, and identify the propagation tool used, the propagation model used within that tool, including but not limited to, the coefficients used in the model and any additions, corrections or modifications made to the model.

Answer to Question 2:

The requested ESRI shape files and spectrum coverage maps, along with the relevant “link budgets,” are attached hereto as Attachment E. The maps depict USCC’s present cellular (Band Class 5), PCS (Band Class 2), and LTE (Band Class 12) coverage of the Relevant Area. The information provided in the shape files with respect to USCC’s CDMA, EVDO, and LTE coverage is described below.

The ESRI shape files are provided for the following types of network coverage in the Relevant Area.

- **CDMA Coverage**

We attach analysis of USCC’s CDMA 1XRTT reverse link budget. It provides a threshold for expected “In-Vehicle” coverage as identified by Reverse Link Required Effective Isotropic Radiated Power(EIRP). Industry standard coverage prediction tools were used to create predicted coverage plots. The threshold value was then used to create the provided contour showing where USCC expects to have at minimum “In-Vehicle” coverage. The predictions are based on mathematical estimations at a 30x30 meter grid level, and resized to a 180x180 meter due to processing constraints. Actual coverage will vary and depend on many factors typical of radio technologies including but not limited to distance to cell, cell/resource loading, subscriber speed, indoor/outdoor usage, etc.).

- **EVDO Coverage**

Similarly, analysis is provided for USCC’s EVDO reverse link budget. It provides a threshold for expected “In-Vehicle” coverage as identified by Reverse Link Required Effective Isotropic Radiated Power(EIRP). Industry standard coverage prediction tools were used to create predicted coverage plots. The threshold value was then used to create the provided contour showing where USCC expects to have at least mobile “In-Vehicle” coverage. The predictions are based on mathematical estimations at a 30x30 meter grid level, and resized to a 180x180 meter due to processing constraints. Actual coverage will

vary and depend on many factors typical of radio technologies including but not limited to distance to cell, cell/resource loading, subscriber speed, indoor/outdoor usage, etc.).

- LTE Coverage

Lastly, analysis is provided for USCC's LTE reverse link budget. It provides expected "In-Vehicle" coverage as identified by Reverse Link Required Effective Isotropic Radiated Power(EIRP). Industry standard coverage prediction tools were used to create predicted coverage plots. The threshold value was then used to create the provided contour showing where US Cellular expects to have at least mobile "In-Vehicle" coverage. The predictions are based on mathematical estimations at a 30x30 meter grid level, and resized to a 180x180 meter due to processing constraints. Actual coverage will vary and depend on many factors typical of radio technologies including but not limited to distance to cell, cell/resource loading, subscriber speed, indoor/outdoor usage, etc.).

QUESTION 3. On page 3 of the Public Interest Statement, the Applicants submit that the Proposed Transaction "will undoubtedly improve USCC's network and strengthen its ability to compete with its larger rivals." For each of the Relevant Area, provide a detailed discussion of how the Proposed Transaction promotes and preserves meaningful competition, would still allow rival service providers and potential new entrants to provide an effective competitive constraint, and how it would allow the Company to become a more effective competitor. Provide all documents relied on in preparing the response.

Answer to Question 3:

As noted above, the additional 12 MHz of 700 MHz C Block spectrum would better enable USCC to compete in the Relevant Area, now and in the future. Future competition is not something which can be estimated or quantified precisely but competition is now thriving in the Relevant Area and likely will do so in the future.

Attachment C hereto contains detailed comparisons of the network performance of USCC and its main competitors in the Relevant Area. The comparisons indicate that the additional spectrum will help USCC make its network more competitive with its competitors.

Attachment B of the instant application, incorporated by reference here, described the spectrum holdings of USCC's competitors in the Relevant Area. They are extensive. For example, in Illinois RSA #4, AT&T holds B Block 700 MHz spectrum, A, C, and D Block AWS-1 spectrum, and A and D Block PCS spectrum.

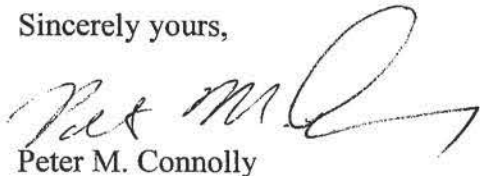
USCC has no current market share data for the Relevant Area but believes, based on data for the neighboring Peoria MSA, that the numbering information to be reviewed by the Wireless Bureau for the Relevant Area in connection with the Proposed Transaction will demonstrate a healthy degree of competition in Illinois RSAs #3 and #4.

It is also worth noting that competition in the Relevant Area will be strengthened by the award of six new wireless licenses as a result of the 2015 AWS-3 auction and by the award of new licenses in the 600 MHz auction in 2016.

In closing, USCC would also stress that it is one of the few remaining mid-sized wireless carriers, a category which formerly included such strong competitors as Alltel, Midwest Wireless, Western Wireless, Leap, MetroPCS, Atlantic Cellular, and Dobson Cellular. Such carriers once provided disciplining competition to the largest wireless carriers. But they are now gone, absorbed by larger carriers. USCC however has chosen to remain a wireless carrier and is pursuing a long term strategy which involves strengthening its spectrum position in regions and markets where it has the strongest position and largest market share, and thus the best chance to succeed. The Proposed Transaction is part of USCC's acquisition strategy [REDACTED]
[REDACTED]

We ask the FCC to permit this relatively small acquisition of spectrum to go forward, precisely to strengthen USCC as a competitor to the "Big Four" and other carriers. The Proposed Transaction will strengthen competition nationally and locally.

Sincerely yours,



Peter M. Connolly

cc: Katherine Harris, FCC (katherine.harris@fcc.gov)

**Attachments A through E
Redacted from Public Inspection**

**Confidential Information Subject to
Protective Order in WT Docket 15-266
Before the Federal Communications Commission**